



Military Health System Health Care Reengineering Fact Sheet



Technology & Health Care Nov. 1998

Home-based Asthmatic Management

The Initiative: When a child is diagnosed with asthma and meets specific clinical criteria, the family is provided with telecommunications equipment for installation in the home. The program uses existing touch-tone telephone lines, a video camera, and a regular television screen or computer monitor.



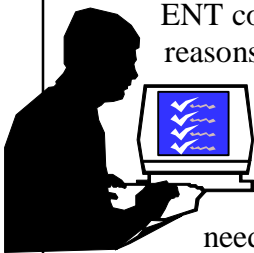
The family uses the technology to contact a provider when the child experiences an asthmatic attack. The provider evaluates the situation, directs the parents in a home-based treatment protocol, continues evaluation, and determines whether the episode is being resolved adequately at home or whether the child needs to be taken to an emergency room.

The Results: The use of this equipment by Vandenberg Air Force Base and the Naval Medical Center San Diego decreased demand for emergency room services and admissions to the hospital. Another benefit is the security it provides to the parents—whether at home or deployed.

Category: Clinical—Access; **Reference** #98006.

ENT Referral and Treatment

The Initiative: Primary care managers (PCMs) in TRICARE Region 9 who want to refer patients to ear, nose and throat (ENT) specialists complete a Web-based, automated criteria checklist. If patients meet the criteria, the information is sent electronically to the ENT specialist. If patients do not meet the criteria, providers are sent to a knowledge base that includes information on how to make the diagnosis, the appropriate treatment (both medical and lifestyle) and when to make a referral. If PCMs still want an ENT consultation, they can “override” the criteria by inputting their reasons. Once the referral is made, the PCMs and the ENT specialists schedule a video teleconference (VTC) where the PCMs perform an assessment or procedure with the specialists virtually by their side.



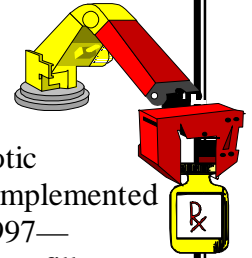
The Results: The electronic checklist eliminated the need for a utilization review nurse to screen the referral. The number of referrals that failed to meet medical necessity decreased by 97 percent. To date, over 130 patients have been seen using this process, resulting in saving over 2,200 staff-hours and deferring travel costs of \$40,000. On average, \$241 is saved on each consult.

Category: Clinical—Access; **Reference** #98007.

Robotic Pharmacy

The Initiative:

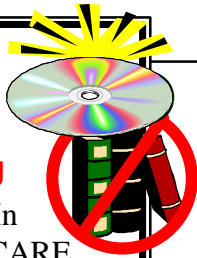
The 45th Medical Group's robotic pharmacy—implemented on June 1, 1997—automatically refills prescriptions that are phoned in by patients. The system interfaces with the Composite Health Care System (CHCS), which can generate a bar code for the prescription. The system fills the script by finding a matching bar code on a Baker cell. If the cell does not contain enough pills, the prescription is not filled. Based on the bar code, the system also generates a digital image of the medication and dosage on the computer screen for further verification that the script has been filled correctly. The script is then transported by conveyor belt to a pharmacist, who performs a final check. If a patient with multiple prescriptions has one that must be filled manually, the rest of the prescriptions are diverted to a different area so the pharmacist may complete the order.



The Results: The robotic system at Patrick AFB fills an average of 250 prescriptions an hour and 72,000 prescriptions each month.

Category: Administrative—Pharmacy; **Reference** #98016.

Text Management Reengineering



The Initiative:

In June 1997, the TRICARE Management Activity Office in Aurora, Colo., began to reengineer its text management system. The staff decided to distribute manuals electronically (using their Web site and CD-ROMs); paper would be used as an exception. It was expected that migration to an electronic publication and distribution process would minimize or eliminate many problems, provide the agency with substantial savings in resources and improve the products.

The Results: Producing one paper-based manual of 1,500 pages costs about \$100,000 in reproduction and mailing costs and takes about eight weeks. "Change Package" revisions had an estimated monthly budget of \$20,000 for reproduction and mailing, took four weeks to publish revisions and presented numerous version control issues. Electronic publication (1) involves minimal additional expenses other than resources, (2) achieves savings by reducing printing, packaging, mailing and supply costs, (3) takes literally hours—instead of weeks—to produce documents and (4) eliminates many version control issues.

Category: Administrative;
Reference #98025.



The Center of Excellence for Medical Multimedia

The Center of Excellence for Medical Multimedia (CEMM) develops advanced multimedia computer programs that make highly complex medical topics both simple and interesting for patients of all ages and educational backgrounds. The media platforms for the projects include CD-ROM, DVD, VHS video and the Web.

CEMM's proof-of-concept project is a virtual reality interactive C-9 Nightingale. The program familiarizes patients with the aircraft before they are sent in the aeromedical evacuation system. They can tour the aircraft, examine cockpit instruments, watch nurses handle an in-flight medical emergency and see what it is like to fly at 35,000 feet.

A tonsil and adenoid surgery program educates patients about the procedure, discusses its risks and benefits, and answers questions about what will be done and why.



More information about CEMM's products can be found on its Web site (www.cemm.org).

Category: Training & Education;
Reference #98021.

What Is MHS Reengineering?

The Military Health System (MHS) defines reengineering as, "A spectrum of activities from incremental or continuous improvement to radical transformation that critically rethinks and redesigns products and service processes to achieve mission performance gains." Reengineering improves quality of care and access to care, increases satisfaction of patients and staff, and decreases health care delivery costs.

What are fact sheets?

People in the MHS share their innovative programs with the Health Care Reengineering (HCR) Program by submitting initiatives. We then summarize selected initiatives and results in fact sheets. One goal is to give MHS staff a sampling of how reengineering can help them and their customers. Another is to encourage the MHS staff to look on the HCR Web site for more initiatives.

How can I get more information on initiatives?

We post initiatives on our Web site. You can download the complete submission, which also contains contact information for the initiative submitter. After surfing to the Reengineering Program's home page, just "Go to Innovations & Initiatives," then follow the link to the "Abstracts." Initiatives are organized by category and reference number.

How can I share my initiatives?

Submissions from the field are critical to the success of the MHS, and everyone in the MHS is encouraged to participate. Initiatives can be submitted via the World Wide Web, fax, e-mail and regular mail.

How can I contact the HCR staff?

E-mail: mhshcr@tma.osd.mil
Telephone: 703/681-8830
Fax: 703/681-8799
DSN Prefix: 761
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